DR-62. THE TOTAL SYNTHESIS OF CONVOLUTAMYDINE A IN THE CONDITIONS OF THE CATALYSIS BY β-AMINOALCOHOLS OF PINANE AND CARANE STRUCTURE

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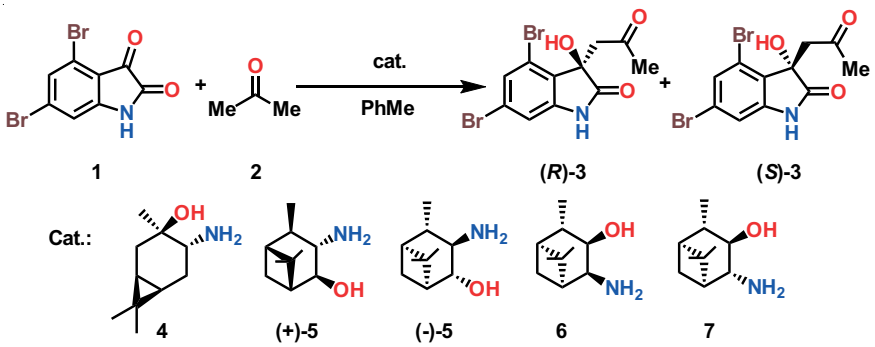
Convolutamydine A **3** is an inhibitor of the differentiation of human leukemia cells [1]. It is obtained by the direct –C–C– combination of 4,6-dibromisatin **1** with acetone **2** [2]. As a rule, such condensations are carried out in the presence of organocatalysts of nature origin – aminoacids, alkaloids, aminoalcohols [3, 4].



5 мол% 4	20 мол% (+)–5	5 мол% (–)5	20 мол% 6	20 мол% 7
72 ч 20 °C Выход 75 % (*R*)-3 ee 80 %	20 ч 20 °C Выход 62 % (*S*)-3 ee 83 %	72 ч 20 °C Выход 86 % (*R*)-3 ee 90 %	72 ч 20 °C Выход 90 % (*R*)-3 ee 69 %	20 ч 20 °C Выход 79 % (*R*)-3 ee 63 %

In the present work, the total synthesis of Convolutamydine A **3** was carried out under the conditions of catalysis by β-aminoalcohols of pinane and carane structure **4–7**. Enantiomerically enriched (*R*)-Convolutamydine A **3** was obtained by catalysis of **(–)–5**.

References

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